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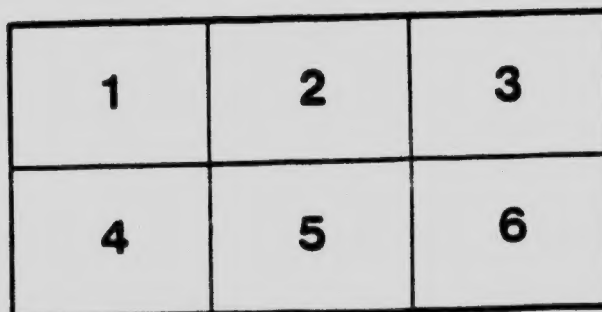
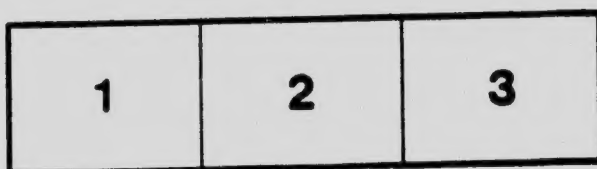
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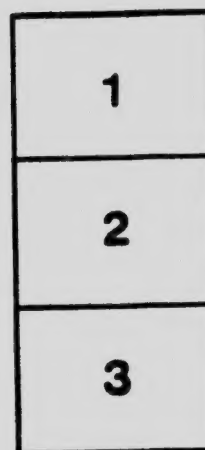
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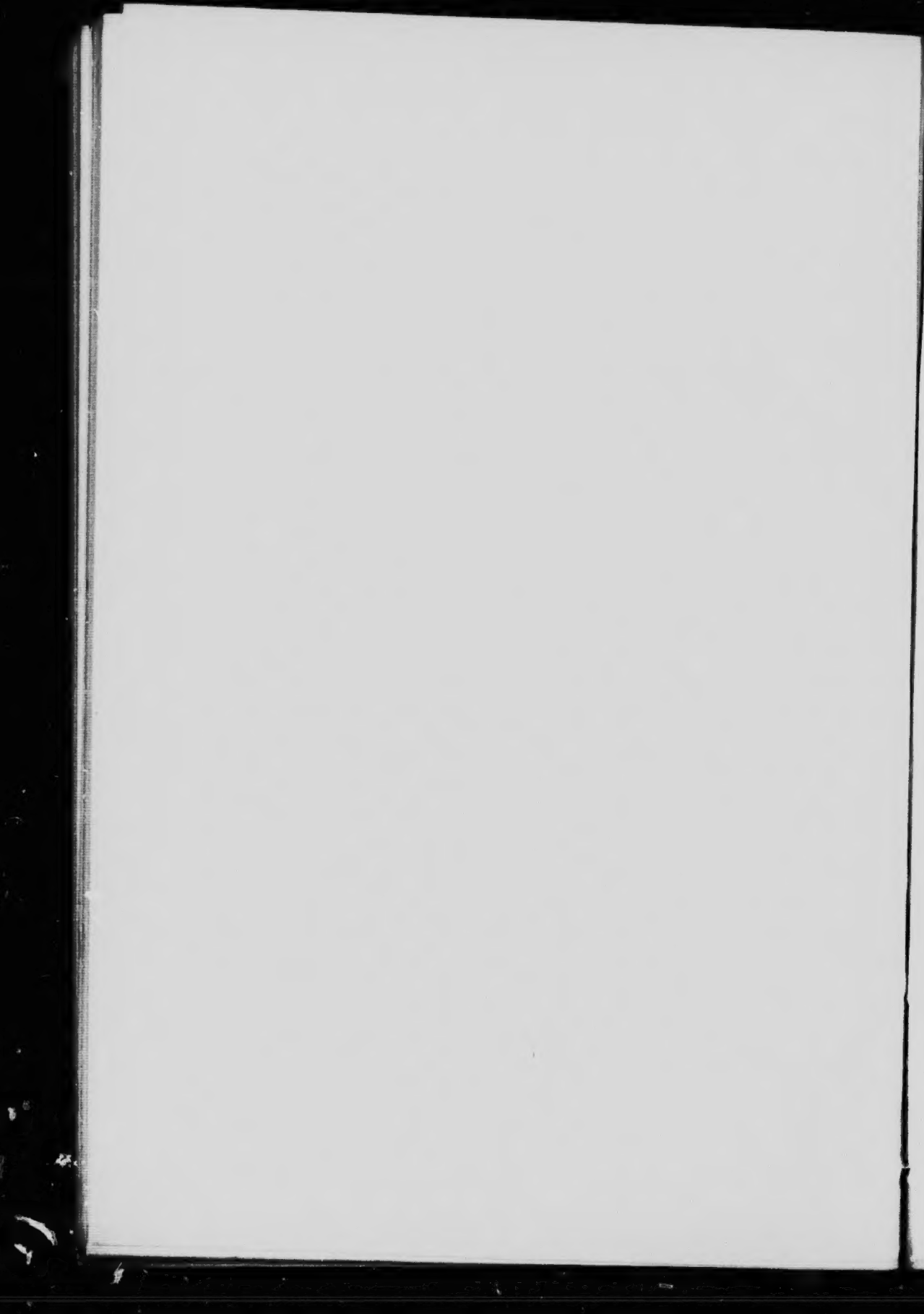
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GERMANY
THE ECONOMIC PROBLEM

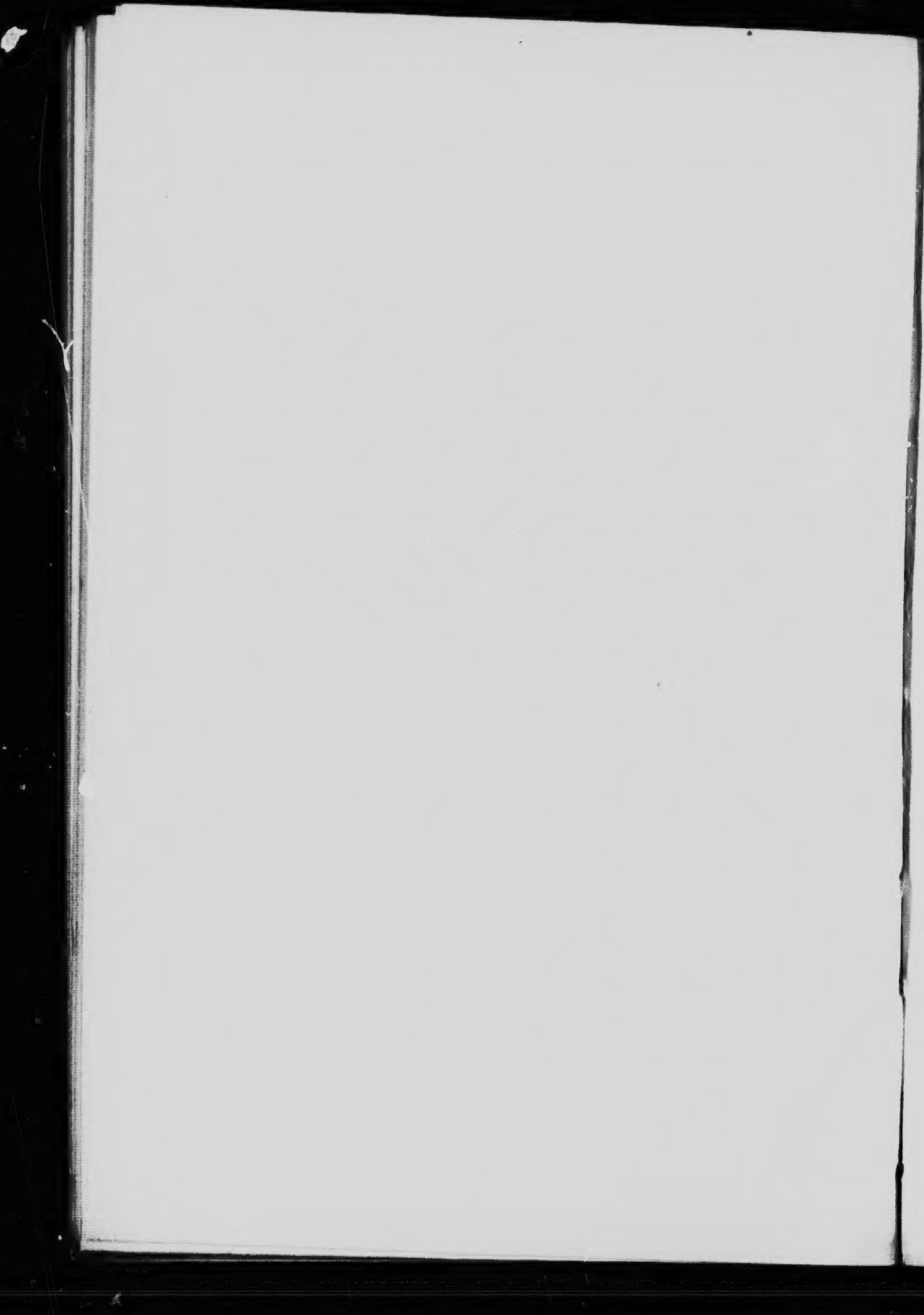
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GERMANY AND THE ECONOMIC PROBLEM

SINCE war was declared between Great Britain and Germany no assertion has been more generally heard than the prediction that 'the economic strain' would, if nothing else, break down the capacity of the German Government and nation to maintain the struggle. What precisely this 'economic strain' would be and in what forms it would convincingly reveal itself was not always made clear, even by those who most confidently made the assertion. But as commonly used it may be presumed to imply, first, that the financial resources of the German Government would not prove equal to the drain and expenditure of a war on two fronts and at sea, prolonged beyond six or eight months; secondly, that the economic and industrial organization and resources of Germany were of such a character as gradually to collapse under the remorseless pressure of war; thirdly, that German trade and commerce would be practically ruined by the conditions of war; and fourthly, that in all these respects Great Britain was markedly superior—her wealth greater, her resources larger and more elastic, her industrial organization and commerce less vulnerable.

Are these assumptions, axiomatic to many British minds, approximately sound? Is an economic and financial collapse in Germany to be expected? If so, when will it come? Can Great Britain reasonably infer

that she can stand better than Germany the tremendous economic strain of this unparalleled war?

It is worth remarking that a view, directly opposite to that commonly held in Great Britain, has been expressed between 1907 and 1913 by several German experts, notably Dr. Riesser, Dr. Steinmann-Bucher, and others, who have devoted much labour and research to an analysis of Germany's economic resources and organization. They hold that Germany is better organized for war on the commercial and financial side; that Germany would conduct a great war more economically; and that a violent and widespread interruption of the machinery of international exchange, finance, and trade would hit Great Britain harder than it would hit Germany. But it is also worth remarking that their calculations seem to rest on a comparatively short war (i.e. not prolonged beyond six or eight months), and do not make sufficient allowance for the results produced by a war of twelve or even eighteen months. Nor do they sufficiently allow for the gigantic and unparalleled proportions and the political and military features of the present war.

Unparalleled in its economic features the present war certainly is. The territorial area of the belligerent States, the volume of industry and commerce directly affected, the areas on land that are the theatre of military operations, the magnitude of the armies involved, the world-wide extent of the naval operations, the expensiveness of modern armaments, the rapidity with which those armaments are used up, the strain on the belligerent States to equip and maintain their armies in the field, combine to provide an economic problem to which no parallel exists in the history of the world. Six out of seven of the great monetary centres of finance—

London, Paris, Berlin, Petrograd, Vienna, Brussels—are directly involved. New York, the seventh, as the capital of a neutral Power alone is not touched, and New York without the free working of the other six is practically paralysed. The moratorium that was proclaimed throughout the civilized world last August, and the closing of the Stock Exchanges, in order to avoid a general financial cataclysm, bear eloquent testimony to the violence and widespread havoc that the war at once produced and is continuing to produce. The volume of commerce and trade of the belligerent States, directly affected by war conditions, amounts to 70 % of the trade of the whole world. Only 30 %, i.e. barely one-third of the production and exchange of goods by mankind, belongs to neutral States. And of the mercantile marine of the world engaged in the transport of goods across the seas, about 80 % belongs to belligerent States, and must work under the conditions imposed by war.

Any and every estimate of the degree of economic strain for any particular belligerent State must necessarily be both rough and hypothetical—rough because our information and our data for calculations cannot be statistically precise, hypothetical because speculation as to the duration of the war has to reckon with unforeseen and unforeseeable military or political developments that may revolutionize the general situation.

For clearness' sake I propose to examine the economic problem as it may affect Germany and Germany's resources alone, and to assume throughout that the present naval conditions will broadly continue. It is desirable also to separate at the outset two different propositions and conclusions which are frequently confused : first, the general economic exhaustion and disloca-

tion or ruin of her trade which Germany may ultimately have to face as the broad result of the war ; and, secondly, the immediate effect on her economic resources *while the war lasts* and on her capacity in consequence of this direct effect to find the means to wage war. For, even if we make the extreme assumption that ' the war will ruin Germany's trade and commerce ', that Germany will emerge from it a mere ghost of her former economic self, and that a generation may pass before her productive powers and shattered economic organization are restored to the normal level, say, of 1913, ultimate ruin will not of itself mean present incapacity to wage a long war. Nations, like individuals, may ruin themselves in a gigantic effort. Ultimate exhaustion is no sure basis for inferring incapacity both to make and prolong a great struggle for a very considerable time. It is far too commonly assumed amongst ourselves that the mere loss of trade on a large scale by Germany will rapidly be a decisive factor. We do not sufficiently distinguish between the ultimate and total cost and its effects, and the immediate cost and its effects, of war. The whole bill, of course, has to be paid in the long run. But the capacity of a nation to wage war and to continue to wage it, primarily turns on its capacity to meet the bill and the drain on its resources of the moment, governed by the conditions of the moment, not of the future governed by the conditions of the future. Broadly, then, the cost of war and the capacity of a nation to meet it may be analysed under three main heads : (1) the money cost of carrying on the military and naval operations required (i.e. the equipment and maintenance of the armies and fleets and the armaments) and the material capacity to feed and clothe the non-combatant population and maintain the industries

necessary for the armies and fleets, and the feeding and clothing of the population as a whole ; (2) the cost (conveniently reckoned in money cost) of the pre-existing wealth and fixed or circulating capital (buildings, crops, live-stock, mineral resources, &c.) destroyed by the military operations ; (3) the loss of human producing power represented by the number of men killed in battles and by disease or permanently crippled.

The first is obviously of the most immediate importance. For unless the losses under (2) or (3) are of such a character as directly and immediately to cripple the nation's material resources for war they can be primarily ignored. A nation that cannot provide the numbers of men required admittedly cannot continue to make war. Similarly, if a nation as the result of military operations found itself deprived of the raw material directly necessary for equipping or maintaining its armaments, or of the food-stuffs for feeding the soldiers or the non-combatant population, or if the destruction of wealth or capital were so large or of such a kind as to bring this about, that nation would be 'starved' into making peace. Great Britain, for example, deprived of the command of the seas, simply could not continue the war. A Germany deprived of coal, iron-ore, copper, oil, even if she had the food and the men, could not continue the war. The 'economic strain' would in each case be decisive. But unless the elements reckoned under (2) and (3) are of this decisive character, the amount and volume of the loss to be reckoned subsequently under these heads will be imperceptible at first, and will be very gradual in its depleting and crippling effect. Ultimately they will figure in the total bill of cost and may reach gigantic figures and produce no less gigantic results ; but the destruction of pre-existing

wealth and of capital will not necessarily nor need for a long time be a factor to be reckoned with in estimating capacity to bear the cost of a war, particularly in the case of a very wealthy country such as Germany. And it is worth noting that as a fact, in the case of Germany as of Great Britain, the losses placed under (2) as above have not so far been really serious. Germany has lost a large number of her mercantile ships; she has suffered invasion in some of her colonies and settlements; but her territories in Europe have been practically free from invasion. The Russian invasion of East Prussia in August was short, and the damage has been calculated at not more than £20,000,000. Germany has waged war in Poland, Belgium, and France, and the terrible destruction of wealth (i.e. of fixed or circulating capital) in the areas of military operations has fallen wholly on Russia, France, and Belgium. How far this state of things will continue is at present a military rather than an economic question. It is sufficient to note that so far the damage suffered by Germany is practically insignificant. It has not in any way affected her economic capacity to 'go on'. Nor are there at present any trustworthy indications that the losses in the battle-field or the numbers employed in her huge armies have weakened her power to maintain the industries employed in arming, feeding, and clothing the troops or feeding and clothing the civil population. Unemployment, widespread dislocation of production and distribution there certainly are, but there is no evidence that either is on a scale to cripple Germany's resources in these respects. The harvest has been gathered in and stored; as far as we can judge, German organization has seen to it that there will be a harvest in 1915. The vast armies have not prevented the shipyards or Krupp's

works at Essen, and the clothing factories in Saxony, working at high pressure. The mines are producing their raw material and the railways have the material and the labour requisite to work with organized efficiency. If, in short, 'the economic strain' is going to cripple Germany, it must be sought elsewhere than in the casualty lists and the destruction of wealth and capital. Moreover, up till now France and Russia have both suffered as heavily as Germany in the casualty lists and far more heavily than Germany in the destruction of pre-existing wealth. Great Britain, it is true, is more fortunate. She has suffered in both respects less, far less so far, than her major allies, and far less than her major opponent.

We come back, therefore, to the losses under our first heading and the capacity to meet them as the crucial and immediate problem. What is the conduct of the war actually costing the German Government? Recently our own Government has put the cost for ourselves at £1,000,000 a day, without any guarantee that this 'moderate' estimate will not be exceeded—as it almost certainly will. In 1909, Dr. Riesser calculated that the first six weeks of a great European war would cost Germany at least £125,000,000. This would give us £250,000,000 for the first three months and £500,000,000 for the first six months—if the weeks after the first six were not less expensive. There is no good reason for supposing that war tends to become cheaper as it proceeds; on the contrary, particularly a war of the present kind, in which the numbers in the field tend to rise rather than fall, it tends to become dearer, as material and armaments not reckoned in the first cost wear out and require to be replaced. In 1909 Dr. Riesser did not allow for the increases which science

has brought about in the cost of armaments—war is intrinsically more expensive since 1909—nor did he fully anticipate the gigantic efforts Germany would be able to make. More recently Dr. Julius Wolf has estimated the cost at a money expenditure of not less than £2,000,000 a day and more likely to be £2,500,000. An estimate of £500,000,000 for the first six months may be regarded, therefore, as highly probable; and this does not include any of the cost reckoned under our second and third heads, but is simply the bill reckoned in money of the expenditure necessary for equipping and maintaining the armies and ships employed and the organization of all supplies necessary for efficient conduct of the war. What must be subsequently added under (2) and (3) we need not pause to inquire.

How is this bill going to be met? What are Germany's resources in wealth, either capital or savings from the national income, to meet it?

The volume of Germany's foreign trade is broadly represented by the following figures:

	<i>Imports.</i>	<i>Exports.</i>
1910 . .	£465,499,600	£382,209,900
1911 . .	£500,347,250	£411,219,900
1912 . .	£550,856,600	£454,976,450
1913 . .	£534,750,000	£495,630,000

Germany is therefore a creditor country, and as a creditor country is second only to Great Britain. The difference in values between imports and exports is roughly, for 1910, £83,000,000; 1911, £89,000,000; 1912, £96,000,000; 1913, £39,000,000. (The sudden drop in 1913 is rather puzzling and is susceptible of various explanations. It probably can be regarded as quite exceptional.) Taking £80,000,000 as the rough average difference, we may broadly account for it by assigning

£25,000,000 to £30,000,000 of the 'invisible exports' to the profits, freights, and services of the German mercantile marine, which in tonnage is second only to the British mercantile marine. The other £50,000,000 to £55,000,000 as part of the return on German capital invested outside Germany. The actual amount of this investment has been the subject of much investigation by German economists, whose estimate at £1,500,000,000 has been accepted as approximately correct by experts in this country. Further analysis of the trade figures reveals: first, that broadly 44 % of the imports (i. e. £243,000,000) and 39 % of the exports were from or to States with which Germany is at war, and that 56 % of imports and 61 % of exports were from or to allied or neutral States: secondly, that the last twenty years of Germany's trade exhibit well-defined features—manufactured goods (finished or half-finished) form a smaller proportion of the imports and a larger proportion of the exports, while the imports of food, cattle, and luxuries have steadily risen in value. Similarly the imports of raw material for industry have steadily increased, while the exports of food-stuffs and cattle have slowly declined. Germany, in short, as she has become industrialized and improved her industrial efficiency, with a steady increase in her population, has become less and less dependent on other countries for manufactured articles, but more and more dependent on foreign markets for the export of manufactured goods, for the import of food-stuffs with which to feed her population, and also for the import of raw material with which to feed her industries. We are on tolerably safe ground if we infer that to-day 20 % of her visible imports are in manufactured goods, 50 % in raw material for industry, 30 % in food-stuffs and luxuries: while of the visible

exports 20 % are in raw materials, 72 % in manufactured goods, and 8 % in food-stuffs. It may also be noted that the tariff duties collected on the foreign trade provides the German Government with some £40,000,000 of revenue, between one-fourth and one-fifth of the total imperial revenue.

Estimates of the national savings and the total (capitalized) wealth of Germany are necessarily hypothetical and uncertain. Dr. Steinmann-Bucher's estimate put the national income at £1,750,000,000 and the total wealth at about £17,000,000,000. More recently Dr. Helfferich puts the national income at about £2,000,000,000 and the total national wealth at about £18,000,000,000. (His estimate for Great Britain is a total between £14,000,000,000 and £15,000,000,000.)

It is difficult either to accept or to criticize these figures, but financial experts in this country have agreed in thinking they are probably exaggerated. It is certainly remarkable that Dr. Helfferich's figures in 1913 for the national income follow almost exactly the figures worked out in our census of production for Great Britain in 1907, i.e. he estimates the value of goods produced at between £1,900,000,000 and £2,100,000,000, the consumption within Germany at about £1,700,000,000 and the savings available for investment at between £320,000,000 and £350,000,000 ; but if we are prepared to dismiss the suspicion due to this striking identity and accept the estimate, it at least gives us a broad total for subsequent calculation. For it means that if the first six months of war cost Germany £500,000,000 she could pay for it with something less than two years' savings, and even if another £250,000,000 (a low estimate) were added for wealth destroyed, not reckoned in the cost of £500,000,000, she could pay the total bill with three

years' savings and have a substantial balance in hand—*if, that is, her national income and national savings during and after the war remain at the pre-war level.* But what is tolerably certain is that neither during the war nor after it will her national income remain at anything like the estimated level for 1913. Can we roughly calculate what is likely to be the effect of the war on that national income and on governmental revenue? Some plain conclusions are suggested by the statistics cited, which may indicate the forms that 'the economic strain' will take.

(1) Germany's trade with the belligerent countries will practically cease altogether, i.e. her trade with Great Britain and the British Empire, with France, Russia, Portugal, Servia, Montenegro, Japan, and with Belgium: i.e. about £240,000,000 of her exports and £175,000,000 of her imports must be at once deducted from her total trade; (2) her trade with her ally Austria representing £58,000,000 of exports and £42,000,000 of imports, will be seriously dislocated and diminished, as will also her trade with the Ottoman Empire; (3) her trade with neutrals, in theory unimpaired, will be seriously dislocated, and mainly in four ways: (a) the diminished spending power of the neutrals caused by the war will mean a contraction of their demand for Germany's goods; (b) as Germany has lost the command of the seas, her means of shipping goods to and from her market to theirs are gravely imperilled and must be subjected to the delays of devious routes through neutral territory (e.g. Switzerland, Italy, Holland, Denmark) with increased charges for insurance and freight which may kill the trade altogether; (c) the effect of various classes of goods being declared contraband or conditional contraband by Great Britain

and rendered liable to capture or forfeiture. The recent action of Great Britain in applying the doctrine of 'the continuous voyage' to conditional contraband will probably very materially diminish the total quantity of imports and cause certain categories of imports to disappear altogether; (d) Germany will have to reckon with the competition first of Great Britain and then of neutral States (e. g. the United States) in the neutral markets, a competition working under more favourable conditions, to capture trade hitherto in German hands, which will certainly further diminish Germany's trade. Precise estimates in figures of the effect of these various forces are not possible. But we have some significant sidelights. For the month of September German exports to the United States fell from a value of \$19,000,000 to a value of \$3,000,000, while her imports fell from a value of \$35,000,000 to a value of \$3,000—an extraordinary shrinkage. It is noteworthy that in the same month British exports to the United States actually increased by a value of £1,400,000—eloquent testimony to the money (quite apart from the military) value of the command of the seas.

Fourthly, we are safe in concluding that, inasmuch as her mercantile marine has now been driven off the sea, Germany will lose the £25,000,000 or £30,000,000 derived from freights, &c., earned by that marine. Fifthly, the tremendous reduction of imports and exports will reduce the governmental revenue derived from the tariff. A moderate estimate would put that reduction at one-half—from £40,000,000 to £20,000,000. Sixthly, the return on German investments of capital outside Germany will be heavily reduced. Seventhly, the earning power of the magnificent State railways—a source of revenue to the Government—which is dependent on

flourishing trade within and without, must be seriously impaired.

Whichever source, in short, of Germany's governmental or national income we investigate, the general conclusion is clear that under the stress of war the production and consumption of wealth within the Empire will probably be reduced by something like 50 %, and the savings available for meeting war expenditure will be correspondingly diminished. Even if there is no further addition to the war bill, and no further shrinkage in the national income, an expenditure of £750,000,000 will take not two but probably seven years' savings.

This does not mean that Germany's immediate power to carry on the war is crippled. It only means that the burden is being spread over a longer period of peace and that the future is being more and more heavily mortgaged. But the estimated results point to the conclusion that a very small percentage of the war bill can be met by revenue and additional taxation. It can only be met by borrowing, and borrowing on a large scale. What, then, is Germany's capacity to borrow ?

She must borrow from herself and from her own resources. She cannot float a loan (as Japan and Russia did in 1905 and onwards) in the neutral money markets. Only one of the great money markets, New York, as has already been emphasized, remains, and a loan in New York is neither a political nor a financial possibility. Nor is it possible for her to realize to any appreciable extent, though at a great loss, her investments in neutral countries and reinvest the proceeds in a home war-loan—for the simple reason that neither the United States, nor Brazil, Chile, Argentina, China, &c., hard hit by the universal war, can buy what Germany might be willing to sell. The finance houses

in New York, intimately connected with German international finance, may or may not subscribe to a German home-loan and sell or pledge some of their holdings, if they can, in American or other securities to do so; but the amount so obtainable is really negligible in relation to the amount that has to be raised. Nor is it necessary to rely on this help. The gold in the Reichsbank, the deposits in the Savings Bank (those for Prussia alone figure out at over £600,000,000), the deposits in the great banking corporations, make the assumption safe that Germany can, if her people choose to do it, lend the Government for the expenses of the war probably at least £500,000,000, and can also pay by extra taxation an additional sum. The financial methods may be open to question, the ultimate effect of borrowing on this scale may be damaging or even disastrous, particularly if Germany is not victorious, but we shall err seriously if we conclude that the German Government cannot borrow from the German people much more than £500,000,000 in the first six or eight months of the war. The future may be heavily mortgaged by so doing, but it can be done; and if the German people are convinced that any and every sacrifice is a duty, that victory will come in consequence, and that heavy indemnities will partially if not wholly recoup the temporary sacrifice, however severe, it will be done. We must not look for any collapse of credit or borrowing power for at least six, perhaps eight, perhaps twelve months, perhaps even longer. The wealth is there—the product of forty years of saving, superb organization, and industrial development—and can be applied to any purpose the German people choose.

There is no good reason for thinking that Germany will not be able to feed her armies and civil popula-

tion for many months to come. Her food imports are not, as with ours, absolutely essential. She imports roughly £150,000,000 worth, but she exports £40,000,000 worth, leaving a net import of £110,000,000 worth, i. e. not £2 per head of population (compared with the £6 per head of population in Great Britain). Her harvest has been gathered undisturbed by invasion, and it has been a good harvest; she has carried off a certain amount of the Polish harvest, even of French crops in the north. The element of luxuries in the food imports must be reckoned with; also she has been able to add through Denmark, Switzerland, Holland, and Italy, to her own resources. Germany imports £12,000,000 worth of coffee. But Germany can fight without coffee if necessary, nor will her population starve because coffee is cut off altogether. The exports of Austria-Hungary in cereals, flour, cattle, swine, fowls, eggs, and sugar are enormous (about 40 % of the whole export trade), of which only about 5 % goes in the ordinary course to Germany, but on which Austria's ally will now have a first claim, and which will help to make up the deficit in Germany's food supplies from other foreign countries. Similarly, Germany will have the great Hungarian resources in horses at her disposal. That the German nation will be deprived of many luxuries, that it may have gradually to go on to short rations, that there will be privation and sacrifice, we may take for granted; but that she is within measurable distance of starvation, or that the reduced quantities of food imports will vitally affect her fighting powers for many months to come, are not conclusions warranted by the facts as we know them. Nations can fight for a long time on short rations if they think the end worth the sacrifice.

A more difficult problem is raised by the question, How far are the industries essential or directly subsidiary to the waging of war likely to be crippled by a cessation or a marked reduction in the imports of raw materials? It may be taken for granted that German trade and production as a whole cannot continue on the level of 1913 for twelve months without the import of raw materials on a very large scale, and that many industries are absolutely dependent on these imports and must cease altogether when the pre-existing stock is exhausted. But are we entitled to infer that if Germany is deprived of her imports of cotton, wool, jute, coal, iron ore, lignite, hides, silk, nitrates, copper, rubber, oil—for these are her chief imports of raw materials—amounting to some £280,000,000—it will be impossible for her to manufacture what war requires for her armies and her civil population? Let us note first that an enormous quantity of these imports are required for the production of manufactured goods which Germany exports in steadily increasing quantities. These imports are not directly necessary for war purposes or home consumption. The raw material is imported, manufactured into a finished or semi-finished article, to the immense economic advantage of Germany, but neither the import nor the export is 'consumed' in Germany. In many categories of raw material Germany has more than enough in her own resources to produce what she requires for her own consumption. The loss of foreign imports and of exports for foreign consumption, however severe, will not of itself for a considerable time bring about 'economic starvation'. There will be a great drop in the wealth of the country, but depletion is not paralysis, and depletion of this kind takes a long period to make itself felt. Secondly, by the virtual annexation of

Luxembourg Germany has secured the rich iron ore fields in that duchy. Her own coal-fields can supply all that is needed for home needs. Raw silk and wool, when the export trade is reduced, can probably be obtained in sufficient quantities to meet reduced home needs for a considerable time. And the same applies to cotton. The general economic loss will steadily mount up; factories will cease to work; bankruptcies will increase; prices will rise. The longer this period is prolonged the more serious will be the general economic havoc which the country must face when the war ends, but it would be rash to assume that the stringency will, before twelve months have run, mean such a pressure that Germany cannot carry on the war. Jute, nitrates, various chemical imports, copper, rubber, oil—these are all directly necessary for the war, and they can only be obtained by imports. Efficient governmental organization—and it is certain there will be such—can reduce waste, control unnecessary consumption, and prolong the period for which the pre-war stocks can last. We do not know the amount of those stocks, nor whether for example the supply of oil from Roumania and Hungary can make good the serious loss of the Galician oil-fields. German science may find a workable substitute for jute, though this is questionable. But neither organization nor control nor science can create oil, rubber, copper, nitrates, and certain chemical products that Germany imports. There are indications that in all these articles shortage is already being felt, and that great difficulties are experienced in procuring any addition to the stocks through Italy or any other neutral channel. If Great Britain retains the command of the sea and is able through naval vigilance, aided by the seizure of contraband and the application of the principle of 'the

continuous voyage ' to conditional contraband to secure that the import of raw material in those categories is practically cut off, the manufacture of what is necessary for the conduct of the war may really be so reduced as to be as damaging as a military defeat. It is in this direction that first of all the economic strain will be literally effective. The armies may be slowly starved long before the population is starved and financial credit so shaken as to compel the Government to sue for peace.

It would be unsafe to reckon on the effect of unemployment. The tremendous drop in imports and exports, the cessation of her shipping trade, the no less tremendous diminution in production consequent on these two results of the war, must have caused unemployment on a very large scale. But the feverish activity in certain trades directly concerned with the war, and still more the absorption of millions of men who would normally be employed in industry into the army, will for the males in the population counter-balance much, perhaps most, of the unemployment. It is fairly certain that the unemployment of women is the most serious economic feature at present, for Germany, like every highly industrialized country, has come to be dependent on female labour. Unemployed women cannot be absorbed into the army nor can they all be employed as nurses. Most of the women thus unemployed are dependants as mothers, wives, or daughters of soldiers, and their maintenance as such is a governmental matter. There is no reason to believe that the German Government neglects their claims. That is why in estimating the German war bills we must reckon in the money allowances allotted to the dependants of soldiers and why the money cost is

necessarily high for a country with 4,000,000 to 5,000,000 of men under arms in the field and another 2,000,000 under training and in reserve. The economic pressure from draining industry to make up armies and from maintaining men and women, either displaced because industry has been severely dislocated or because they are dependants on the displaced men absorbed into the armies, will steadily increase. The number of mouths to be fed and of bodies to be clothed will actually increase as more children are born, but the quantum produced for feeding and clothing will be steadily diminishing. Some months must elapse before the results take the form of distress, but when that point is reached the distress must rapidly become acute.

The longer that Germany is able to keep the war away from her own borders the longer can the pressure of economic forces be staved off. But if the theatre of military operations is slowly shifted to her own territories, the economic results may well be more important and decisive than the military. An effective Russian invasion of East Prussia and upper Silesia, an effective invasion of (German) Lorraine, Luxemburg, and Westphalia west of the Rhine, will strike at the supply of raw material (iron and coal in particular) in its most vulnerable quarters. Germany, from the military point of view, has in the Rhine and the Oder a superb, perhaps (in the west at least) an impregnable defensive position, capable with the military forces at her disposal of defying vast armies. But a Germany entrenched behind the Rhine, the Vistula (as far as Thorn) and the Oder will very soon discover that if the North Sea is sealed up, she cannot, economically speaking, dispense with the granary of East Prussia, the Silesian, Luxemburg, and Lorraine coal and iron fields, and all the industries in

the 'Lancashire' Westphalia, west of the Rhine. Industry and raw material will fail her long before her male population gives out. We are safe in concluding that Germany cannot for six months arm, clothe, and feed her combatant and non-combatant population on the resources alone provided by the area between the Rhine and the Oder. And if, in addition to this, Russian arms have at Cracow driven a wedge in between Austria and the German Empire, if the trade connexion between Bohemia and Saxony and the south is seriously interrupted, the process of real economic starvation will be considerably quickened.

Nothing has been said so far of the moral element involved in this economic pressure and the capacity and willingness to endure it. For it is difficult, not to estimate its importance or gauge its duration, but to state it in any precise form. A garrison beleaguered in a fortress can fight as long as there are fortifications, guns, ammunition, and food, and must surrender if the fortifications are destroyed, the guns not replaced, and the ammunition and food are exhausted. But the garrison may surrender at any point short of absolute exhaustion if it is convinced that honour is satisfied and that further resistance can achieve no definite result or may even make the general situation worse. So it is with nations. The capacity and willingness of a nation to endure economic privation and make great economic sacrifices, to mortgage the future for the sake of the present, will depend partly on the nature and volume of the resources in hand and partly on the interpretation of the end in view and the likelihood that the sacrifices, however costly, will achieve that end, partly on its moral solidarity and organized power of resistance to the disintegrating

and weakening effects of privation, and loss of material wealth. We cannot question that in all these respects—the material resources, the organized moral power of resistance, moral solidarity, and readiness to make great sacrifices for great ends—the German nation is as well equipped as any of her foes. So long as Germany is inspired by the conviction that victory is essential and is certain if a great effort is persisted in, even if purchased at sacrifices so great as to cause a general economic exhaustion that will punish and cripple a whole generation, so long must we expect that she will make those sacrifices up to the extreme limit permitted by the material economic conditions. That those limits will permit the prolongation of the struggle considerably beyond the period frequently estimated in many quarters, it has been my object to show. That the prolongation may ultimately result in an economic exhaustion and paralysis, a war bill which when all its elements are reckoned up may reach to thousands of millions of pounds—that will perhaps absorb the savings of a whole generation to liquidate, and may total up to a fifth or even a third of Germany's capitalized wealth—is quite possible. And it may be taken for granted that the longer the prolongation the greater the amount of the total war cost. But until the material resources by which Germany can wage war are exhausted—and under present conditions that cannot be expected for several months at least still to come—the economic pressure will not become decisive unless one or other or both of two developments occur. Germany may, slowly or rapidly, become convinced that she cannot win and that sacrifices justified by the certainty of success are not justified when the final result may be failure. Ruin or exhaustion compensated

for by victory is one thing ; exhaustion aggravated by failure or defeat is another. France in 1871 wisely concluded that it would be folly to prolong the struggle. *La défense nationale* had saved the nation's honour and self-respect but no more. And a similar frame of mind may slowly or rapidly be formed in the Germany of 1915. Secondly, the development of military operations may by a series of slowly accumulated results or a few decisive strokes revolutionize the economic situation and enormously reduce the economic and material limits within which effective resistance is possible. The military campaign may, in short, administer the economic *coup de grâce*.

For Great Britain the problem is simple in statement if difficult in achievement. So long as she can retain the effective command of the sea it is certain that her economic resources from every point of view will be superior to those of Germany. The command of the sea puts time as well as wealth on her side. A nation with time and wealth as its allies need fear no foe, if it is prepared to provide those allies with the military striking power—the men that are necessary both in numbers and quality. The decisive word rests with the ships that neither German and Austrian, nor Russian and French armies will probably ever see. The military and the economic future of Germany lies indeed on the grey waters of North Sea, English Channel, and Atlantic, and on the blue and sunlit waters of the Mediterranean. The most tremendous chapter in world-history and the world-influence of sea-power is now being written in the silence of the seas. British sea-power has created the economic problem for Germany and British sea-power can ultimately solve it.

NOTE 1

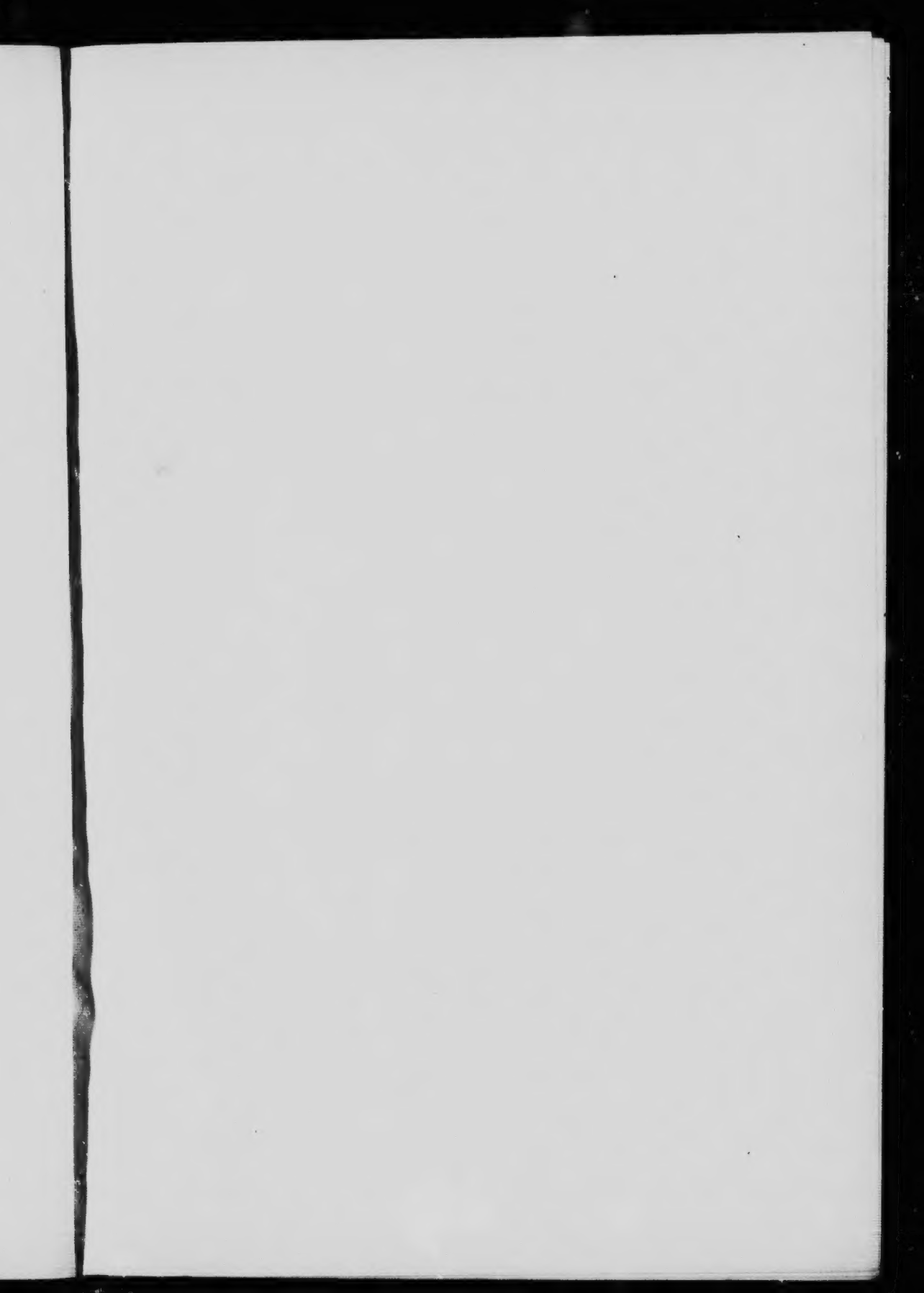
The financial soundness of the German banking system and of German banking methods in general opens up controversial technical questions of great difficulty, that cannot be discussed with advantage here. Such information as is available suggests that, with the collapse of the export and import trade, the German banks, for all the brave show of figures on paper (the totals of deposits and the Savings Banks returns), are straining the credit of the country to breaking point. If recent figures can be trusted the amount of gold in the Reichsbank is about £98,000,000: notes have been issued against this to the amount of £200,000,000. In addition, other banking corporations have issued notes of a value about £55,000,000 mainly against securities held or deposited, i.e. a total note issue of over £260,000,000, a very large amount of which is really inconvertible paper currency. The Imperial Government has issued some £50,000,000 of 5 per cent. Exchequer Bonds and placed about £170,000,000 of a 5 per cent. war loan. It is commonly asserted that 25 per cent. of the Savings Banks deposits have been absorbed in this loan. In addition, the Prussian Government has floated or is floating a loan of £75,000,000, through the Kriegsdarlehenskasse, which by pledging it to the Reichsbank can issue notes against it, which notes apparently are to be regarded as gold cover for the issue of an equal amount of Reichsbank notes. In other words, the Reichsbank can issue notes up to the full amount of the Prussian loan—a singular and dangerous expedient. It is not surprising that the German exchanges have fallen eleven points, and that there are signs of depreciation in the paper currency. These and similar financial operations will doubtless enable Germany to continue the war, but

26 GERMANY : THE ECONOMIC PROBLEM

in the long run they must very seriously aggravate the financial and economic dislocation of the war. And if further heavy loans are required in the immediate future, it is not easy to see how they can be floated without mortgaging assets already mortgaged by the previous operations. The recent severe strictures of the Swiss Bankverein on these operations are significant. But, as Professor Foxwell has lately pointed out, our own financial methods are not above damaging criticism.

NOTE 2

From confidential information that has reached me since the preceding pages were written, the amount of the pre-war stock of cotton and wool has probably been over-estimated, and the depletion in that stock since August 4 probably under-estimated, in the argument. There seems good reason for believing that the shortage in cotton is serious, and in wool also, despite the capture of wool stores at Antwerp. Nor does it seem likely that either (particularly wool) can be made good in adequate quantities through neutral channels. Similarly the supply of oil from Roumania (even if permitted) is effectively blocked by Servian control of the Danube, the German oil companies having hitherto used transport wholly by water. Recent German regulations about copper and rubber point to serious shortage. Similarly, the recent statistics of unemployment, given by the Socialist organ, *Vorwärts*, show, if correct, that the inference in the text about female unemployment is sound, and that, in spite of absorption into military service, male unemployment is steadily increasing and preparing grave economic problems for the German Imperial and State Governments. C. G. R.



WHY WE ARE AT WAR

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